

AMENDMENTS TO THE CLAIMS

Claims 1 – 192 (canceled)

Claim 193 (new)

193. A system for communicating with a motion controller, comprising:
a set of motion commands;
a set of motion operations, where at least one motion operation is associated with at least one motion command;
a reprogrammable motion controller capable of executing at least one motion command;
a set of selectable software modules, where
at least one software module is associated with at least one motion controller, and
at least two selectable software modules expose a common software interface; and
a software system that is capable of commanding at least one motion controller to perform at least one motion operation using the common software interface exposed by at least one selected software module associated with at least one motion controller.

Claim 194 (new)

194. A system as recited in claim 193 in which a definition of the common software interface is programmatically acquirable.

Claim 195 (new)

195. A system as recited in claim 193, in which a definition of the common software interface is acquirable from at least one of the selectable software modules in the set of selectable software modules.

Claim 196 (new)

196. A system as recited in claim 193, further comprising an operating system on which the software module is run.

Claim 197 (new)

197. A system as recited in claim 196, in which a definition of the common software interface is acquirable from the operating system.

Claim 198 (new)

198. A system as recited in claim 193, in which a definition of the common software interface is acquirable from a persisted storage medium.

Claim 199 (new)

199. A system as recited in claim 198, in which the persisted storage medium is a disk file.

Claim 200 (new)

200. A system as recited in claim 193, in which at least one motion operation causes data to be read from the motion controller.

Claim 201 (new)

201. A system as recited in claim 193, in which at least one motion operation causes data to be received from the motion controller.

Claim 202 (new)

202. A system as recited in claim 193, in which at least one motion operation causes motion data to be written to the motion controller.

Claim 203 (new)

203. A system as recited in claim 193, in which at least one motion operation causes an object to move.

Claim 204 (new)

204. A system as recited in claim 193, in which at least one primitive motion operation causes a motion device to move.

Claim 205 (new)

205. A system as recited in claim 193, in which the software system further comprises a user interface for selecting at least one selectable software module.

Claim 206 (new)

206. A system as recited in claim 193, in which the software system further comprises software functionality that programmatically selects at least one selectable software module.

Claim 207 (new)

207. A system as recited in claim 193, further comprising a selection software module comprising a user interface that allows at least one selectable software module to be selected.

Claim 208 (new)

208. A system as recited in claim 193, further comprising a selection software module comprising software functionality that programmatically selects at least one selectable software module.

Claim 209 (new)

209. A system as recited in claim 193 in which the motion commands comprise primitive motion commands and non-primitive motion commands, wherein:
functionality of the non-primitive motion commands can be emulated by a combination of primitive motion commands; and
functionality of the primitive motion commands cannot be emulated by a combination of primitive motion commands.

Claim 210 (new)

210. A system as recited in claim 209, in which the motion operations comprise primitive motion operations and non-primitive motion operations, wherein:
functionality of the non-primitive motion operations can be emulated by a combination of primitive motion operations;
functionality of the primitive motion operations cannot be emulated by a combination of primitive motion operations;
each non-primitive motion operation is associated with at least one non-primitive motion command; and
each primitive motion operation is associated with at least one primitive motion command.